

Title (en)  
TURBINE WITH QUICK-CLOSING VALVES AND REGULATING VALVES

Title (de)  
TURBINE MIT SCHNELLSCHLUSS- UND REGELVENTILEN

Title (fr)  
TURBINE MUNIE DE SOUPAPES À FERMETURE RAPIDE ET DE SOUPAPES DE RÉGULATION

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Application  
**EP 16778768 A 20161004**

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Abstract (en)  
[origin: WO2017071912A1] The invention relates to a turbine (1) having a turbine regulating unit (2), a turbine protection unit (3), at least one safety block (38), quick-closing valves (5) and regulating valves (6), wherein the quick-closing valves (5) and the regulating valves (6) can be actuated by means of associated switching and setting drives (15, 41), characterized in that the at least one safety block (38) is a pneumatic safety block, and in that at least one switching drive (15) for direct or indirect actuation of a quick-closing valve (5) is a pneumatic switching drive. The invention also relates to a method for retrofitting an existing turbine having a turbine protection unit (3), a turbine regulating unit (2), a hydraulic safety block, quick-closing valves (5) and regulating valves (6), wherein the quick-closing valves (5) can be actuated directly or indirectly by means of associated hydraulic switching drives, characterized in that at least one hydraulic switching drive of a quick-closing valve (5) is replaced with a pneumatic switching drive (15), and in that there is provided a pneumatic safety block (38) which at least partially replaces the functions of the hydraulic safety block.

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